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Reform Design and Implementation

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Ministry of Agriculture and Land Reclamation

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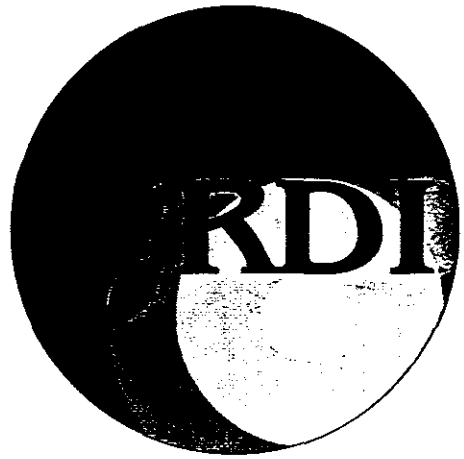

APRP

Reform Design and Implementation Unit

Development Alternatives Inc. Group: Office for Studies & Finance, National Consulting Firm Development Associates, Cargill Technical Services, The Services Group, Training Resources Group, Purdue Universities, University of Maryland

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Report No. 164

Policy Issues In Beef And Dairy Production And Marketing In Egypt

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EXECUTIVE SUMMARY

The objective of this study is to identify major constraints to developing the meat and dairy production sectors in Egypt and to propose a framework for a program to mitigate these constraints.

The research team conducted extensive field visits and interviews with industry stakeholders to obtain first-hand information on beef and dairy production and marketing.

Analysis of the information showed that the solutions to the problems in these sectors must be based on existing structures, services, and potentials. However, the major areas that need intervention are:

- **Financing.** Soft loans with low interest rates and requiring reasonable collateral should made available to small- and medium-scale producers.

- **Services.** The knowledge and training of extension workers should be upgraded, and efficient dissemination networks and livestock service centers should be established.

- **Genetically Improved Livestock.** A core (nucleus) breeding herd should be made established to provide farmers with better stock. In addition, milk-recording systems should be expanded, and producers should be given access to artificial insemination from good bulls.

- **Feed.** Feed should be of consistent quality, and the ingredients should be consistently available. Rules concerning the standards and specifications of feed should be enforced.

CHAPTER ONE
BEEF AND DAIRY PRODUCTION IN EGYPT

The gap between consumption and production in Egyptian beef and dairy production is increasing rapidly. This is the result of institutional, structural, organizational, and management deficiencies in the beef and dairy production and marketing systems in Egypt.

The objectives of this study are to:

1. Identify technical, market, and policy issues that adversely affect the development of the livestock and dairy sectors in production and marketing;

2. Recommend technical, policy, and marketing interventions that will improve nutrition, performance, animal productivity, and value-added products for small- and medium-scale beef and dairy producers; and

3. Provide the tools to implement and support the recommendations.

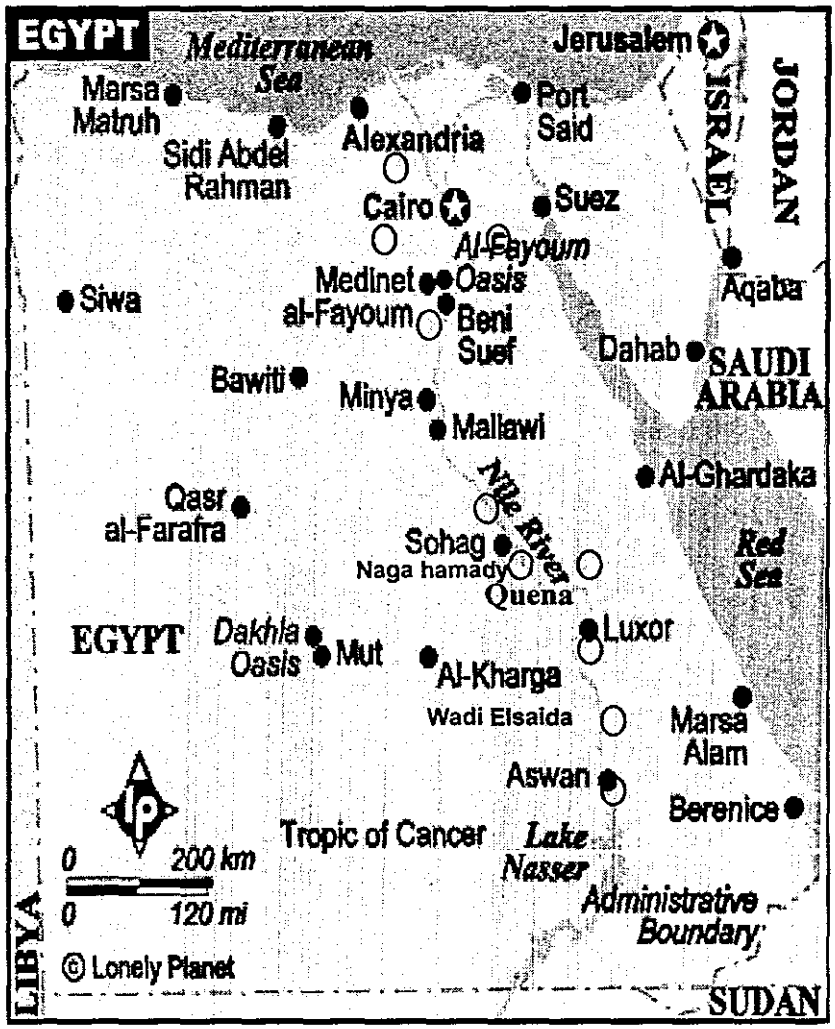
The livestock industry in Egypt faces constraints regarding financing, livestock extension services, genetics, and feed. Each of these constraints will be discussed in Chapters Two and Three.

STRUCTURE OF THE BEEF AND DAIRY INDUSTRY

In 2000, red meat production was estimated at 530,000 metric tons and milk production at 3.2 million metric tons, or 63 percent and 94 percent, respectively, of the total demand. Commercial farms produce 30 percent of the domestic production of meat and dairy, and 70 percent comes from small- and medium-scale farms. These small- and medium-scale farms contain 96 percent of the livestock population, and the commercial farms have 4 percent.

The beef and dairy sectors in Egypt are important sources of employment and income for farmers in both Upper Egypt and Lower Egypt. Most of the development of beef and dairy markets and services has been in governorates in the north, with limited development in the south. This report covers both northern Egypt and areas of Upper Egypt such as Sohag, Quena, Luxor, and Aswan (see Map 1, on the next page).

Map 1: Areas Visited by the Research Team



O Areas visited by the research team

As shown on the map, most of the development and commercial production operations are in certain governorates. These areas have commanded a great deal of attention from policy makers and development programs. The white circles are the areas visited by the research team. Upper Egypt does not have as developed a livestock industry as the delta or northern region.

INVENTORY OF BEEF AND DAIRY HERDS

Table 1 summarizes the number of animals producing red meat and milk in a 20-year period.

Table 1: Number of Animals Producing Milk and Red Meat in Egypt, 1980–2000 (millions)

Year	Cattle	Buffalo	Sheep & Goats
1980	3.00	2.27	5.91
1985	2.99	2.42	6.70
1990	2.86	2.93	7.56
1995	3.23	3.02	7.30
2000	3.42	3.33	7.70

Source: Compiled from Central Agency for Public Mobilization and Statistics: 1980-1990.
Animal Production Sector, MALR: 1995-2000.

The human population of Egypt in the early 1980s was about 35 million, and the number of cattle and buffalo was 5.27 million. In 2000, the population of Egypt was about 70 million and the number of cattle and buffalo, the main producers of milk and meat, was 6.75 million.

Table 2: Cattle and Buffalo Populations and Regional Distribution

	Number in Millions	Region West-North-Coastal (1,000 head)	Delta (North-Egypt) (1000 head)	Sinai (1000 head)	Upper Egypt South of Cairo (1,000 head)
Cattle		3.3	**50.9**	0.1	**45.7**
Native	2.2942				
Foreign Purebred	0.1003				
Crossbred	0.7230				
Total Cattle	3.1175				
Buffalo	3.0959	2.0	**54.4**	0.0	**43.6**
Total	6.213				

Source: Abdel-Aziz, FAO, 1997.

The cattle and buffalo population is divided. Small herds make up 96 percent, with 48 percent cattle and 49 percent buffalo, and commercial herds make up 4 percent of the population under intensive production.[1]

[1] Report 98 Policy Issues in the Dairy Sub-Sector, Dr. Ahmed Abdel Aziz and Dr. Rabie Sadek, February 1999.

CLASSIFICATION OF BEEF AND DAIRY PRODUCERS[2]

Small-scale Producer: 1-15 Head

Small-scale producers are located mostly in villages. The homes of these producers are usually attached to their barns. These farmers produce primarily for family consumption but sell excess production of non-pasteurized milk to their neighbors and to traders. Male cattle are kept at 150-200 kilograms and are sold to traders and medium-scale producers for fattening or slaughter.

Medium-scale Producer: 15-50 Head

Medium-scale producers are located at the edge of cities and in villages near city markets. The houses of most of these producers are separate from their barns. These producers sell their non-pasteurized milk directly to consumers, traders, and processors. They own mainly buffalo. Live animals are sold when they dry up. This category of producers also keeps high-production cows of foreign breeds, particularly Holstein.

Intensive Commercial Producer: 50 or More Head

Located near cities and in newly reclaimed areas, intensive commercial producers, with herds of 50-150 head, combine dairy and beef production. Those with herds of 150 head or more specialize in either dairy or beef production. The producers have crossbred cows and purebred Holsteins for maximum milk production. In addition, specialized farms produce buffalo milk through intensive production. These dairy operations utilize milking machines and cooling tanks and sell milk directly to processors. A very small number process milk and sell their products to the consumer market. Some of these producers feed veal calves and fatten cattle, depending on market demand. Some sell heifers (year-old females prior to lactation) directly to other producers. The commercial producers sell directly to milk processors, who own their own milk-cooling systems. The beef producers have buffalo and native crossbreeds. They either sell live animals at 200-300 kilograms to small and medium-scale producers or fatten up the stock to market weight of 500-600 kilograms.

[2] For small- and medium-scale producers, does not include range poultry, goats, and sheep.

CHAPTER TWO
IMPORTANT FEATURES OF THE PRODUCTION AND MARKETING SYSTEMS

SMALL-SCALE FARMERS

Production

Small-scale farmers combine both their dairy and their beef production in barn attached to their houses. These producers utilize native cows and buffalo as their main production stock. The larger small farm herds have crossbred cows in the herd mix. The dairy buffalo produces a sweet-tasting, high butterfat (7 percent) milk that is in demand by Egyptian consumers. However, these buffalo have low milk yields compared with the crossbred and purebred Holstein cows. The average dairy buffalo under small farm conditions produces 6-12 kilograms of milk a day. Crossbred and Holstein produce 12-15 kilograms of milk per day.

Buffalo also can produce a good quantity of meat. The daily weight gain for meat buffalo is 0.5-0.7 kilogram eating 4-5 kilograms of concentrate daily plus unlimited green forage.

- Dairy and beef buffalo tolerate heat better than purebred Holstein stock; in addition, the buffalo resists disease better and farmers have less problem with parasite infestation.

- Low milk production and low rate of weight gain are directly attributed to:

  — Low-quality feed ingredients and pellet concentrate;
  — Inconsistent feeding because lack of feed or inability to purchase feed—in particular, Egyptian clover is not available during the summer;
  — Heat stress;
  — Parasite infestation and diseases;
  — Genetic inbreeding; and
  — Poor management.

Feed

Forage Crops. Cornstalks, sorghum stalks, and wheat straw with clover (winter only) are the most common types of forage for animals. However, during this summer most of the forage was fed whole, rather than chopped,

This photograph shows unchopped forage fed to animals by a small-scale producer.

and its extreme dryness resulted in reduced nutritional value and digestibility and in feed wastage for the beef and dairy herds. An excessive amount of wheat straw was fed to the animals during this period. On the new reclaimed land, alfalfa is fed to them when it is when available. All forage crops are grown locally in Egypt.

Concentrate. This feed usually consists of two-thirds concentrate and one-third wheat bran. Wheat bran is added to improve feed quality. The following shows the percentage for ingredients used in pellet concentrate in 1,000-kilogram batches by the feed mills:

Cottonseed Meal	20 percent	by weight
Yellow Corn	25 percent	by weight
Wheat Bran	30 percent	by weight
Molasses	6 percent	by weight
Rice Hulls	15 percent	by weight
Salt	1 percent	by weight
Calcium Carbonate	3 percent	by weight
No vitamin pack or medication		

Many farmers pay 550-650 LE per metric ton for pellet concentrate. The variation in price reflects the cost of transportation. The concentrate available to these farmers is of relatively low quality. Therefore, many small-scale farmers either have to buy corn or have their own corn ground and mixed with wheat bran or cottonseed meal. The mix usually is one part corn to one part wheat bran or cottonseed meal. Some farmers feed 6 kilograms of concentrate to their dairy cows, or 1 kilogram for every 50 kilograms of body weight. Most of the pellet concentrate the farmers receive from feed mills is of very poor quality, both nutritionally and in terms of pellet consistency. The cottonseed meal farmers receive from the solvent extrusion plant in many cases is of poor quality and has much less digestible protein than normal cottonseed meal.

Marketing

The marketing structure for small-scale producers is random. Family consumption comes first, and the balance is then moved into the marketplace. The market then moves to the middlemen or traders, who have major influence on the price of dairy and beef products.

- Most villages throughout Egypt do not have a farm service center or collection system to provide access to milk cooling, filtering, and storage tanks where processors or large-scale traders can pick up the milk. The shelf-life (time in storage) of raw milk is very short. Therefore, the advantage goes traders, and prices are set accordingly. The only controlling factor is competition among traders.

- The lack of an efficient transportation network, especially in rural areas with poor roads for cars and trucks to transport milk, is an obstacle. This is particularly the situation with regard to the marketing of milk because farmers use traditional transport—that is, donkeys—to move it from farms to marketing places and to

consumers. As a result, the quality of delivered milk is reduced because of the long time required for transport and the fact that the milk is exposed to all types of environmental conditions, including heat.

- The examples below show a cross-section of the prices producers receive for raw milk in a particular region, city, or village:

  1. 0.60-0.80 piastres per liter (Mubarak Project for New Graduates, Bellal village, Behera)

     —These prices are set by the trader or middleman. The lack of good transportation is the main reason for the low price. Major village centers are excess of 20-30 kilometers.

     —Cow milk is mixed with buffalo milk.

  2. 1.25 LE per liter (Sohag)

     —The price is set by a trader or middleman.

     —The milk supply is close to the consumer.

  3. 1.5 LE per liter for buffalo milk and 0.80 piastres per liter for cow milk (Sanshour-Manofia)

     —The price is set by a trader or middleman.

  4. 2.5 LE per liter for buffalo milk (Aswan inner city)

     —The milk is sold directly to consumers. No trader or middleman is involved.

- Small-scale producers sell veal calves of 150-200 kilograms to traders for 7.75 LE per kilogram. Animals are sold through the local village market. Many producers are forced to sell cattle at a young age to buy feed for dairy or beef stock.

- Producers with five to seven head of livestock feed bull calves to 400-500 kilograms and sell them to a trader or directly to a butcher.

- Ninety-six percent of the animals in the beef and meat market are bought and sold using an estimated weight and the eye of the buyer. Thus, if an animal weighs 300 kilograms, the price would be 2,700 LE.

- There are a few commercial marketplaces, such as in Luxor. This market has a capacity of 400 head, including sheep and goats. The charge is 1 LE for small animals and 10 LE for large animals. These prices vary, however, depending on how often the

seller, trader, or middleman participates in the market. The most frequent traders get a front position, close to the entrance.

- The marketing is still done by individuals haggling over price of an animal.

- There are 17 villages surrounding the Luxor area that have their own rural markets and serve the bigger commercial market. (This situation is the same in almost all Egyptian governorates.) Traders buy from the surrounding village market and transport the stock to the commercial market in Luxor to sell. This commercial market operates every Tuesday.

- The red meat market for small-scale producers throughout Egypt suffers from:

  — The price of feed—concentrate—is too high for small-scale producers to make a profit.
  — The poor quality of concentrate requires good producers to purchase feed ingredients to improve the quality of the feed.
  — The stock has low genetic potential.
  — The extension services are inefficient because of low salaries, no incentives, and no support for developing livestock programs.

MEDIUM-SCALE FARMERS

Production

The majority of medium-scale producers are specialized. Their dairy operations may contain mixed cows and purebred Holsteins. Buffalo are used mostly in milk production.

- Production levels both in dairy and in beef are higher for these producers than for small-scale farmers:

  — Medium-scale farmers are more aware of good animal husbandry, and they take advantage of available extension services and programs.
  — Communication is better for this group. These farmers participate in cooperatives such as Sanshour, the cattle production association
  — Medium-scale farmers have the ability to purchase higher-quality feed ingredients to mix with concentrate pellets. These farmers also have more knowledge about where they can locate quality feed and ingredients.
  — Some of the larger producers use automatic portable milking machines.
  — Many of these farmers are traders or middlemen themselves, thus providing them with an additional source of revenue.

- There still is a major problem in controlling diseases and parasites.

- The principal problem for these producers is low-quality breeding stock. Farmers cannot afford to purchase good stock for replacement, and they do not have access to artificial insemination programs.

Feed

Forage. Clover is available in the winter (December–May). In the summer, corn stalks, sorghum stalks, and wheat straw are used as animal feed. Many medium-scale producers have forage delivered to them daily or weekly, depending on the needs of farmers in the surrounding area. As the herd size increases, many producers have problems maintaining a consistent supply of good-quality forage, particularly in summer. In newly reclaimed areas, Alfa-Alfa is grown throughout the year.

Concentrate. This feed usually consists of two-thirds concentrate and one-third wheat bran. Wheat bran is added to improve the quality of the concentrate. The following formulation is used in pellet concentrate:

Cottonseed Meal	20 percent	by weight
Yellow Corn	25 percent	by weight
Wheat Bran	30 percent	by weight
Molasses	6 percent	by weight
Rice Hulls	15 percent	by weight
Salt	1 percent	by weight
Calcium Carbonate	3 percent	by weight
No vitamin pack or medication		

Many medium-scale farmers buy wheat bran and grain on either the open or the black market to supplement concentrate from the feed mill. Some farmers have a small hammer mill and grind their own feed. The quality of ingredients the producers receive from traders is relatively low.

- A producer in the Aswan area pays 676 LE per metric ton of concentrate and to it he adds ground corn that costs him 1,125 LE per metric ton.

- Most rations are 25 percent concentrate + 25 percent yellow or white corn + 25 percent wheat bran. This ration costs 735 LE per metric ton.

- These producers pay the following for ingredients:

— White Corn	850 to 900 LE per metric ton
— Yellow Corn	750 LE per metric ton
— White Sorghum	1000 LE per metric ton
— Cottonseed Meal	800 LE per metric ton
— Wheat Bran	550-750 LE per metric ton

The major problems for these farmers are price, quality, and availability of feed. The lack of good breeding stock, both for dairy and for beef production, also is a problem.

Marketing

Marketing is random. However, organized marketing is developing within the large producer systems. These producers sell directly to milk processors and butchers. It is important to realize that traders and middlemen have major influence on the price of milk and beef. Many of these producers have their own transportation, thus giving them more flexibility in marketing. Traders will call these producers directly to negotiate purchases of stock.

- Very few medium-scale producers have there own cooling systems for milk. Therefore, they sell to traders or transport the milk themselves directly to processors, who discount based on the condition of the milk.
- Many medium-scale producers will sell directly to consumers in their local villages or cities.
- Some of the larger producers mix crossbred cows milk and buffalo milk.
- These producers sell breeding heifers, veal calves, and fattened steers of 450-500 kilograms.

INTENSIVE COMMERCIAL PRODUCERS

Commercial producers are specialized, either in dairy or in beef. Their dairy herds consist mainly of high-quality imported Holsteins. One example is the state-of-the-art operation at Tobgy Farms in Tameya, Fayioum, with 650 head of pure Holsteins from Canada. Tobgy Farms utilizes a computerized milking system and well-designed and well-drained loafing and feeding areas to reduce heat stress for six months each year. The average production is 22 kilograms of milk per day per cow 305 days a year, at an average of 8 metric tons of milk per cow. In the winter, production reaches 32 kilograms a day per cow. The operation routinely milks three times a day, and everything is washed down, including the cows.

Some of the commercial feedlots specialize in buffalo stock for beef production within the national buffalo beef production project. Some feedlots have both cattle and buffalo. These feedlots have state-of-the-art holding areas, feed bunks, and pens with tie-downs that minimize movement. The feedlots bring in 150-250 kilograms of stock and fatten animals up to a weight of 450-500 kilograms. The majority of their stock comes directly from small- and medium-scale farmers, although a few feedlots buy from large-scale traders.

Production

Commercial producers follow an intensive system of production, depending on the high productivity of the animals. These producers incorporate the latest feed and management technology in this industry.

They face fewer veterinary problems than small- and medium-scale producers because commercial producers have strong veterinary support and use vaccines and medication that are not out of date. In addition, they are able to get private consultations to improve productivity.

Feed

Most commercial farms mix their feed on location, and some have their own feed mills. At times, they sell extra production in the local markets. The good management systems in these farms allow them to use alternative feed ingredients. Commercial farms also use high-quality silage because they have the know-how, machinery, and manpower to process it correctly.

In addition, these farms use vitamins, minerals, and antibiotics to maintain peak performance in their herds. And they can import feed ingredients such as soybean meal and corn at competitive prices

Even some intensive commercial farms do not chop forage, thus reducing its digestibility. (picture from state owned farm, Quena)

Marketing

The commercial producers market directly to dairy and beef processors and work on a narrow profit margin.

Nonetheless, these producers have major concerns:

- The quality of foodstuffs—concentrate, cottonseed meal, and soybean meal—is poor.
- Feed costs are extremely high.
- Veterinary services and medication costs are very high.
- High interest rates on loans limit growth, particularly in the beef industry.

CHAPTER THREE
THE CURRENT LIVESTOCK SITUATION IN EGYPT

Most of the constraints on the livestock sector in Egypt affect small- and medium-scale producers. The commercial farmers, in contrast, are active members of associations in which they can participate in decision making. Commercial farmers also have access to loans from banks to improve their operations.

CONSTRAINTS

1. **The centralized institutional structure and management deficiencies within cooperatives and extension services constrain the development of the dairy and meat production sectors.**

One main constraint is the centralized administration, with most of the research centers and senior decision takers in Cairo. The agricultural administration in each governorate does not emphasize animal production, the agricultural cooperatives provide limited services for animal production, and extension services face many constraints—for example, lack of trained extension workers who specialize in livestock and the absence of financial incentives to improve the skills of extension workers. As a result, the typical extension worker does only routine work, without innovation or willingness to do more than what is required.

It is important to note that the roles of agricultural cooperatives and extension services already have been determined. More planning is not needed; rather, the decisions that have already been made need to be implemented. One problem is that trained managers for production operations are not available. Like small- and medium-scale producers, extension workers have experience solving breeding and husbandry problems. In fact, in some areas animal husbandry is common. What extension workers lack is management resources and the knowledge of how to find suitable alternatives to solve animal production problems.

2. **The financing programs for the beef and dairy industry and supporting networks are inconsistent and often unrealistic. Financing at low interest rates for short-, medium-, or long-terms is not available.**

The lack of available funds does not mean there are no entities to provide them. Rather, the issues are the cost of loans and how it is easy to obtain them. For example, PBDAC provides loans to farmers in the livestock industry but the qualifying criteria for these loans are difficult for small- and medium-scale producers to meet. These criteria serve as obstacles to production rather than a way to facilitate it. PBDAC requires the borrower to own land or to be a land tenant, but will provide a loan for only up to five animals and, in addition, the farmer has to own five feddans. If the livestock industry is to be strengthened, why limit the loan to only five animals for the five feddans? In addition, the

interest rates for PBDAC loans—up to 13 percent—are too high for small and medium-scale farmers. These conditions drive most farmers to seek loans from private banks. Now, MALR is working with some private banks to provide loans with good conditions to these farmers; this service should be expanded.

3. The lack of a core breeding herd to improve the beef and dairy herd stock of small- and medium-scale producers is a major constraint on the livestock industry in Egypt.

The absence of a core herd for genetic improvement is particularly evident in Upper Egypt because producers there depend on the same bulls for long periods of time. In a commercial dairy farm owned by the state of Quena that the research team visited, the herd of Holstein dairy cows and heifers was not replaced for more than eight years. As a result, the problems caused by inbreeding were obvious as was some abnormality. In addition, production was low. Yet this farm sells replacement heifers to small- and medium-scale producers, thus distributing the heifers' bad genes to farmers who want to increase their production by using Holstein heifers. The lack of a core herd for genetic improvement also applies to buffalo; farmers use the same bull for several years, and this causes a drop in milk and meat production. The main problem for small- and medium-scale producers therefore is the unavailability of a core herd as a nucleus for the replacement of herds, whereas most commercial farms have programs for replacement, either locally or by importing animals from the United States or Europe.

4. The quality of feed is low, and both the supply and the price of ingredients are inconsistent.

Supply and Quality. Feed is essential in livestock production. In Egypt, feed problems tend to be seasonal. For example, green fodder is available in winter while it is limited in summer. Some grains, such as maize, are seasonal, and the demand is met through imports, which cost more than locally produced grains. Thus, maize is a summer crop so in summer the price is reasonable, whereas in winter Egypt imports maize, which increases the price of feed. Other materials, like wheat bran, are a problem throughout the year because of both supply and cost.

In addition to the supply problem, the low quality of feed is a problem. Most available concentrate is of low quality because some of its ingredients do not meet required standards and specifications. Private mills produce good-quality feed, but it is expensive. The quality of green fodder also is a factor. Farmers, lacking knowledge, give unchopped green fodder to animals, which reduces its digestibility. On some commercial farms, technology is used to chop silage and fodder, thus increasing their digestibility. As a result, the animals require smaller amounts and produce higher yield.

Price. The price of feed reflects the cost of its ingredients, and because prices are not stable, producers adjust the ratio of the ingredients that make up feed. For example, the price of wheat bran on the black market is 860 LE per metric ton. Although the government sells wheat bran at 650 LE per metric ton, it is not available all the time. In

addition, its price can fluctuate significantly. In one day, the research team witnessed a price increase of 50 LE per metric ton in one government agricultural cooperative. The unstable price and inconsistent availability of wheat bran drive producers to buy on the black market.

The main government mill that provides concentrate to most Upper Egypt cities and villages produces a low-quality feed. Farmers and producers either mix the feed with ingredients from private mills to increase its quality, thus increasing the cost, or buy directly from private mills to mix their own feed. This problem has led some small-scale farmers to pull out of the livestock industry because they cannot afford the high price of feed.

The main problem is the price of wheat bran, which is a secondary product of wheat. Agricultural cooperatives distribute wheat bran to farmers according to the number of head each farmer owns. In some cases, agricultural cooperatives cannot meet the needs of all farmers so they buy wheat bran on the black market, paying a high price for a product of sub-standard nutritional value. Wheat bran is expensive because Egypt imports wheat and subsidizes the cost for bread. To cover this subsidy, the government increases the price of wheat's secondary products, like wheat bran.

One consequence of the lack of management and the inactive extension system is that farmers do not know they can replace wheat bran in feed with cheaper material. This is already being done in large commercial farms, which use alternatives to wheat brain that are low in price and high in nutritional value.

5. Small- and medium-scale producer selling prices are strongly influenced by middlemen and traders.

The lack of milk-collection centers allows traders and middlemen to determine the price they pay the producer, according to the benefits they receive and their distance from producer. Also, the way the milk is transferred does not follow hygienic procedures.

6. There are no privately run livestock service centers.

Livestock service centers should be available to provide services, equipment, feed, seed, fertilizer, and veterinary supplies and services for the dairy and beef industry.

STRENGTHS

- In Egypt, there are strong rules and regulations concerning the livestock and dairy industry if guidelines and standards are enforced.

- The majority of the small- and medium-scale livestock and dairy producers have good basic knowledge of animal husbandry. They require extension programs and tools to help them improve their positions.

- The infrastructure for small- and medium-scale livestock and dairy producers is in place but requires the upgrading of goods and services.

PROPOSED SOLUTIONS

1. Restructure financing for animal production with low interest rates for one-, three-, and five-year loans. The loans must be targeted toward small and medium-scale producers in the beef and dairy industry. The loans should require reasonable collateral, and stations should be dispersed to provide lending services.

2. Reorganize extension services to focus on beef and dairy husbandry. Improve the performance of extension workers by providing training courses to keep them updated on new technology. Also, strengthen their ability to find alternative solutions. Consider financial incentives to give extension workers the motivation to improve their performance; part of this financial support could be provided by the private sector.

3. Establish a core breeding herd for genetic improvement, and provide small and medium-scale livestock producers throughout the country easy access to this herd.

4. Enforce compliance of feed specifications. If extension workers are well trained with regard to livestock, they can provide producers with alternative feed, depending on what is available, and with information about different mix ratios with high nutritional values. However, quality control in both government and private feed mills has to be increased to guarantee good-quality feed at a reasonable price.

5. Reactivate the agricultural cooperatives based on privatization policies to help support small- and medium-scale producers. Members should influence decisions, including with regard to marketing.

6. Establish livestock associations that are funded by donors. In this area, APRP/RDI has assisted in the establishment of the Egyptian dairy federation and the Egyptian meat union. APRP/RDI identified the policy-based bottlenecks in marketing channels in the dairy sector and tested the idea of establishing a dairy federation to represent small-scale farmers, large-scale producers, traders, and processors. APRP/RDI then assisted the dairy federation in writing a draft law and presenting it to the legislature. The APRP/RDI studies on the dairy sector were in reports number 98 and 117. Also, APRP/RDI played a major role in assessing the need for an Egyptian meat union to reflect the interests of stock holders and presented its ideas to the Egyptian government. The assessment was published as RDI report number 162.

7. Support a privately owned and run livestock service center that will provide basic agricultural services to small- and medium-scale dairy and beef producers throughout Egypt. **See Annex C for more details**.

ANNEX A

PROPOSED TERMS OF REFERENCE: POLICY ISSUES IN BEEF AND DAIRY MARKETING IN EGYPT

PROPOSED TERMS OF REFERENCE: POLICY ISSUES IN BEEF AND DAIRY MARKETING IN EGYPT

JUSTIFICATION FOR TERMS OF REFERENCE

The livestock and dairy sectors in Egypt are an important sources of employment and income for farmers of all sizes. They are especially important sources of jobs for women and for small-scale producers in Upper Egypt. In the near past, per-capita consumption of animal sources in Egypt has increased 18 grams per day (2000), a rate that remains low by international standards. Red meat production has been estimated as 530,000 metric tons in 2000, or 63 percent of the total demand. Commercial farms produce 30 percent of the domestic production, and 70 percent is produced by small- and medium-scale farmers. Cattle and buffalo are responsible for more than two-thirds of the total red meat output. Sheep and goats, with a minor contribution of camels, produce the balance. About 30-40 percent of the animals are killed outside slaughterhouses. Imports of red meat are permitted to cope with the meat gap, which is not expected to change significantly. Imports of meat fluctuate, depending on local supply. Milk powder is also imported to fill the gap between local supply and demand.

The current objective of the Government of Egypt and the Ministry of Agriculture is to improve the provision of animal protein to all sectors of the population. This objective is being done within the framework of its program to improve the performance on the private sector to meet consumer demands. Also, the Ministry of Agriculture and Land Reform is committed to a strategy of development that is in line the regulations of GATT and the World Trade Organization.

The red meat market does not perform as efficiently as it could. Efficiency will improve as commercial farms grow and become better organized. The market suffers from a serious absence of information and lack of enforcement with respect to grades and quality standards. The same holds true for the dairy sector.

The purpose of this terms of reference is to carry out a structure, conduct, and performance study of the livestock and dairy industry in Egypt. This study will be the basis for possible policy or technical interventions to improve the performance and size of the sectors in order to improve the nutritional status of the population at large.

OBJECTIVE OF THIS ASSIGNMENT

The objective of this assignment is to carry out a structure, conduct, and performance study of the livestock and dairy sectors in Egypt.

OUTPUT

The product will be a study on the structure, conduct, and performance of the sectors.

TASKS

- Conduct a literature search on the structure of the livestock and dairy industry in Egypt.
- Conduct interviews with prominent members of the sector, in government and in the private sector, at all levels.
- Collect and analyze data on prices and quantities.
- Collect information on imports of red meat and livestock and dairy.
- Compare quality standards with international competitors or exporters.
- Give a seminar or workshop on the results of the study.
- Prepare a final report.

ANNEX B

FIELD VISITS

FIELD VISITS

Behara

1. Nabil Abader commercial farm: Km 134 Alexandria –Cairo Rd
2. Belal Village, Mubarak projects for new graduates, Behara.
   Visited five small-scale farmers and the director of the government cooperative

Cairo

Cattle Information System/Egypt (CISE), Faculty of Agriculture, Cairo University

Sohag

1. Sohag Agricultural Administration
2. Rawafie, Kossair area. 2 commercial private farms (600 head, fattening and 150 head replacement heifers)
3. Beef trader
4. Small-scale farmer
5. Government feed mill

Luxor

1. Local livestock market, intervened 3 sellers and 2 buyers
2. Private feed mill
3. Two small-scale farmers
4. One medium-scale farmer

Quena

1. State-owned farm: 720 dairy animals
2. State-owned farm: 550 fattening animals
3. One small-scale farmer

Naga Hamady

1. Aluminum factory, dairy farm
2. Small-scale farmer

Aswan

1. Aswan agricultural administration
2. Government agriculture cooperative
3. Camel market at Daraw
4. Wadi Elsaida, Africare project
5. Two private medium-scale farmers
6. One commercial private farmer

Fayoum

Tobgy private farms

Giza

Alamyia farm and feed mill at Abou Rawash

ANNEX C

STRUCTURE AND FUNCTION OF A LIVESTOCK SERVICE CENTER

STRUCTURE AND FUNCTION OF A LIVESTOCK SERVICE CENTER (LSC)

- The LSC will be the foundation in developing and expanding dairy and beef production among the small- and medium-scale producers in Egypt.

- The LSC would be a small farm store providing necessary services for a specific agricultural service area. The LSC location would be based on the number of livestock and the farmer population in the surrounding area.

- The LSC would be privately structured as a cooperative with a paid membership. Initial capital for the LSC would be:

  — Donor funds;
  — Membership dues; and
  — Services provided by the LSC.

- Operational capital will be necessary for three to five years. However, as membership and services increase, private sector LSC funds will replace the donor funding.

- The amount of investment will vary, based on services provided at each LSC. These services will include:

  — Small portable cooling tanks (two tanks, for example) to pick up milk from the individual producers and a small portable milk-testing unit. The fresh milk will be filtered and transferred to larger cooling tanks (each tank has a 2-3 metric ton capacity) at the LSC.
  — Veterinarian supplies and assistance.
  — Feed, seed, fertilizer, herbicides, and insecticides for sale.
  — A small basic feed mill to grind, mix, and weigh for either a custom mix or a balanced LSC feed mix for dairy and fattening rations for beef.
  — Custom silage choppers for the members.
  — Workshops focused on dairy and beef production utilizing extension services.
  — Establishment of solid markets for dairy and beef producers in the area.
  — Technical assistance to the members.

The LSC is designed to provide the needed services and support to a sector of the beef and dairy producers, who represents 96 percent of the production in Egypt.

One example of an LSC is Sanshour Cattle Production Association, located in Munofia. It is part of the General Cooperative for Developing the Animal Wealth and Products. Sanshour was started in 1992 with 7 farmers with 10 feddans of land; in 2002, it has 3,800 farmers with 5,575 feddans. This is a private sector effort under the government's cooperative system. The expansion has been slow because of lack of funds. Proper financing, good management, and the support of the Ministry of Agriculture would provide the tools

necessary to develop and increase livestock production by small- and medium-scale farmers in Egypt.

The manager of an LSC should have experience in the livestock industry at the village level with small and medium-scale farmers. This person exists in most villages in Egypt but plays a different role—that of middleman or trader, who has developed a very strong marketing and communication skills with the small- and medium-scale livestock and dairy producers. This trader or middleman already has established a bond of trust with this group of farmers. Utilizing the trader's experience and with some management training, this person will be an immediate asset, providing a major component for the success of the LSC program.